

REMARKS

Claims 1, 3, 4, and 7-21 are presently active.

In the Office Action dated 6 August 2003 ("Office Action"), claims 8-15, 18, and 19 were rejected under 35 U.S.C. §112, second paragraph; claims 1, 7, and 8 were rejected under 35 U.S.C. §102(b) as being anticipated by Gannage, et al., US patent 5,862,099 ("Gannage"); claims 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gannage in view of Bernstein, et al., US patent 6,404,236 ("Bernstein"); claims 3, 4, 16, 17, 20, and 21 were allowed; and claims 11-15, 18, and 19 were indicated as allowable if rewritten as suggested in the Office Action.

35 U.S.C. §112, second paragraph rejection of claims 8-15, 18, and 19

Applicants respectfully traverse the assertion in the Office Action that there is insufficient antecedent basis for the various claim limitations reciting "a read operation", "an evaluation phase", and "a pre-charge phase". These terms do not introduce new elements. They merely refer to operations being performed on (or states of) the memory device.

For example, in claim 8, line 4, it is recited that "the pullup pMOSFET is OFF during a read operation on one of the memory cells." There are many read operations that are performed on a memory device, and whenever a read operation is being performed, the pull pMOSFET is OFF. It is a matter of semantics to use "during a read operation." It is awkward to write "the pullup pMOSFET is OFF during the read operation on one of the memory cells" because there are many read operations that are performed and it is confusing to single out a particular read operation by using the term "the read operation." Therefore, Applicants do not believe that claim 8 is indefinite because of the use of "a read operation."

Similar remarks apply to use of the terms "an evaluation phase" and "a pre-charge phase."

It was pointed out in the Office Action that there was a lack of antecedent basis in claim 11, line 12 for use of "a foot transistor." Accordingly, claim 11 is amended to better define the invention.

It was pointed out in the Office Action that there was a lack of antecedent basis in claim 13, lines 4 and 5 because of "a read-select transistor." It appears that an informality was made and that the term "a read-access transistor" should have been used instead. Accordingly, claim 13 is amended.

Similarly, it was pointed out that "a read-select transistor" was also used in claims 14 and 18. Accordingly, these claims are also amended to correct this informality.

It was indicated in the Office Action that in claim 15, there is lack of antecedent basis for "a foot transistor" in line 17. Accordingly, claim 15 is amended to better define the invention.

35 U.S.C. §102(b) rejection of claims 1, 7, and 8 as being anticipated by Gannage

To better define the invention, claim 1 is amended so that the foot transistor comprises a ground-connected source. Referring to Fig. 2 of Gannage, transistor 202 cannot be identified with the foot transistor as recited in claim 1 because the source of transistor 202 is connected to a sense amplifier. (Note that the source of transistor 202 is connected to DL (Data Line). As described in column 5, second paragraph, DL is connected to a sense amplifier.) Consequently, the source of transistor 202 is not a ground-connected source, and claim 1 is not anticipated by Gannage.

Claim 7 recites "a read-select transistor having a drain connected to the bit line and a source connected to the drain of the read-pass transistor". Nowhere does Gannage have a read-select transistor as recited in claim 7. Referring to Fig. 2 of Gannage, transistor 224 does not have its source connected to the drain of the read-pass transistor 220, and transistor 218 does not have its drain connected to bit line 222. Therefore, neither transistor 224 nor 218 can be identified with a read-select transistor as recited in claim 7, and consequently, claim 7 is not anticipated by Gannage.

Claim 8 is dependent upon claim 7, and therefore is not anticipated by Gannage.

35 U.S.C. §103(a) rejection of claims 9 and 10 as being unpatentable over Gannage in view of Bernstein

Claims 9 and 10 are dependent upon claim 7, and therefore for the reasons given above, Gannage does not teach or suggest the read-select transistor as recited in claim 7.

Bernstein is cited in the Office Action merely for teaching a memory device where a read operation is performed only during an evaluation phase, as well as a domino gate to turn OFF the read-select transistors during a pre-charge phase and to turn ON a read-select transistor during an evaluation phase if a read operation is performed on its memory cell. Therefore, the combination of Gannage and Bernstein do not teach the claim limitation of a read-select transistor as recited in claim 7, and therefore claims 9 and 10 are believed patentable over Gannage and Bernstein.

Respectfully submitted,

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